LED Pocket Projector

Owner’s Instructions

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1 Major Safety Precautions

1-1 Before You Start

Icons used in this manual

Icon	NAME	MEANING
	Caution	Indicates cases where the function may not work or the setting may be canceled.
	Note	Indicates a hint or tip to operate a function.

Using this Manual

- Make yourself fully aware of the safety precautions before using this product.
- If a problem occurs, refer to the 'Troubleshooting' section.

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1-2 Care and Maintenance

Cleaning the Surface and the Lens

Clean the projector using a soft dry cloth.

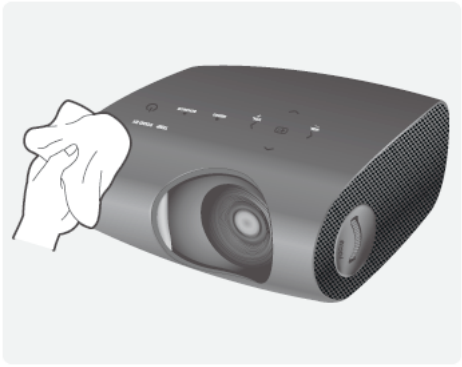
- Avoid cleaning the product with an inflammable substance such as benzene or thinner or with a wet cloth. This may result in a problem with the product.
- Avoid scratching the screen with your fingernails or a sharp object.

This may result in scratches or damage to the product.

- Avoid cleaning the product directly by spraying water onto the product.

If water enters the product, it may result in fire, electric shock or a problem with the product.

- A white stain may be generated on the surface of the projector if water gets on it.



The appearance and the color may differ depending on models.

Cleaning Inside the Projector

For cleaning the interior of the projector, contact a Service Center.

- Contact a Service Center if dust or other substances are inside the projector.

1-3 Safety Precautions

Icons used for safety precautions

Icon	NAME	MEANING
	Warning	Failing to follow the precautions marked with this sign, may result in a serious injury or even a fatality.
	Caution	Failing to follow the precautions marked with this sign, may result in a personal injury or property damage.

Meaning of Signs

Do not perform.

Must be followed.

Do not disassemble.

The power plug must be unplugged from the wall outlet.

Do not touch.

Must be grounded to prevent electric shock.

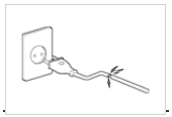
Power Related

The following images are for your reference and may differ depending on models and countries.

Warning

Plug the power plug in firmly.

- Otherwise, it may result in fire.

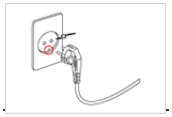


Avoid using a damaged power cord or plug or a loose power outlet.

- Otherwise, it may result in electric shock or fire.

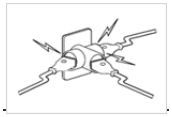
Avoid plugging in or unplugging the power supply with wet hands.

- Otherwise, it may result in electric shock.



Make sure to connect the power cord to a grounded wall outlet (for insulation class 1 equipment only).

- Otherwise, it may result in electric shock or injury.



Avoid connecting multiple electric appliances to a single wall outlet.

- Otherwise, it may result in fire due to overheating of the wall outlet.

Avoid bending or twisting the power cord excessively and avoid placing heavy objects on the cord.

- Otherwise, it may result in electric shock or fire due to a damaged power cord.

To move the product, turn the power off and unplug the power cord and any other wires connected to the product.

- Otherwise, it may result in electric shock or fire due to the damaged power cord.

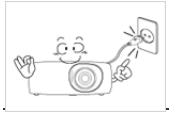
Caution

When unplugging the power plug from the wall outlet, make sure to hold the power plug by the plug and not by the cord.

- Failing to do so may result in electric shock or fire.

Unplug the power plug before cleaning the product.

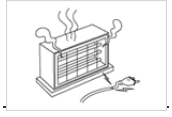
- There is a danger of electric shock or fire.



Connect the power plug to a wall outlet that can be easily reached.

- When a problem occurs with the product, you must unplug the power plug to cut the power off completely. You cannot cut the power off completely using only the power button on the product.

Do not turn the product on or off by plugging or unplugging the power plug. (Do not use the power plug as a power switch.)



Keep the power cord away from sources of heat.

Installation Related

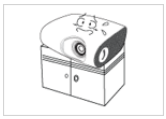
Warning

Avoid installing the product in a location exposed to direct sunlight and installing the product near a heat source such as a fire or heater.

- This may shorten the product life cycle or cause fire.

Avoid installing the product in a badly-ventilated location such as inside a bookshelf or closet.

- Otherwise, it may result in fire due to internal overheating.

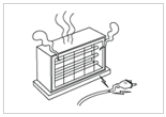


When installing the product in a cabinet or shelf, take care so that the front end of the product is completely supported by the cabinet or shelf.

- Failing to do so may result in the product falling and resulting in damage to the product or injury.
- Make sure to use a cabinet or shelf suitable to the size of the product.

When installing the product on a console or shelf, make sure that the front of the product does not protrude out of the console or shelf.

- Otherwise, this may cause the product to fall off and result in a malfunction or injury.

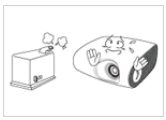


Keep the power cord away from heaters.

- The coating of the power cord may melt and cause electric shock or fire.

When thunder or lighting occurs, unplug the power cord.

- Failing to do so may result in electric shock or fire.



Do not install the product in a location exposed to dust, moisture (sauna), oil, smoke or water (rain drops) and do not install it in a vehicle.

- This may result in electric shock or fire.

Do not install the product in areas with heavy dust.

Caution

Take care not to block the vent with a table cloth or curtain.

- Otherwise, it may result in fire due to internal overheating.

Do not let the product drop while moving it.

- This may result in a problem with the product or injury.

When putting the product down, place it gently.

- Failing to do so may result in a problem with the product or injury.

Do not install the product at a height where children may reach it.

- If a child touches the product, the product may fall and this may result in injury.

Usage Related

Avoid inserting metal objects such as a chopsticks, coins or hairpins, or inflammable objects into the product (the vents, ports, etc).

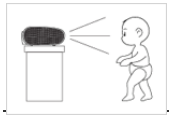
- If water or an alien substance enters the product, turn the power off, unplug the power cord and contact a service center.
- Otherwise, it may result in a problem with the product, electric shock or fire.

Do not let children place objects such as toys or cookies on the product.

- If a child tries to reach for any of these objects, the product may fall and cause harm.

Do not disassemble, or attempt to fix or modify the product.

- When the product requires repairs, contact a Service Center.



Do not look directly at the light of the lamp nor project the picture into someone's eyes.

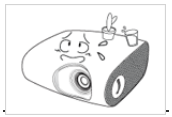
- This is dangerous especially for children.

Avoid using or placing inflammable spray or objects near the product.

- This may result in an explosion or fire.

When you remove batteries from the remote, be careful that they are not swallowed by children. Keep batteries out of the reach of children.

- If swallowed, see a doctor immediately.



Avoid placing a liquid container such as a vase, flowerpot, beverage, cosmetics or drugs, or a metal object over the product.

- If water or an alien substance enters the product, turn the power off, unplug the power cord and contact a service center.
- Otherwise, it may result in a problem with the product, electric shock or fire.

Caution

If the product generates a strange noise, a burning smell, or smoke, unplug the power plug immediately and contact a service center.

- Failing to do so may result in electric shock or fire.

If water or a foreign substance enters the product, turn the product off, unplug the power cord from a wall outlet, and contact a Service Center.

If the power plug pin or jack is exposed to dust, water or alien substances, clean it thoroughly.

- There is a danger of electric shock or fire.

Do not use the product while it indicates a malfunction, such as no sound or no picture.

- Turn the product off immediately, unplug the power cord from a wall outlet, and contact a Service Center.

When cleaning the product, disconnect the power cord and clean the product with a soft dry cloth.

- Avoid using chemicals such as wax, benzene, alcohol, thinner, mosquito-repellent, fragrance, lubrication or cleansing agent when cleaning the product.

This may result in the exterior being deformed or the print being removed.

When not using the product for a long time, such as leaving your home, unplug the power cord from the wall outlet.

- Otherwise, it may cause dust accumulation and result in fire caused by overheating or a short circuit or result in an electric shock.

If the product is installed in a location where the operating conditions vary considerably, a serious quality problem may occur due to the surrounding environment. In this case, install the product only after consulting our Call Center.

- Places exposed to microscopic dust, chemicals, too high or low temperature, high humidity, such as airports or stations where the product is continuously used for a long time etc..

If you drop the product or the case is damaged, turn the power off and unplug the power cord. Contact a service center.

- Failing to do so may result in fire or electric shock.

Make sure to place your remote control on a table or desk.

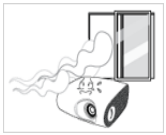
- If you step on the remote control, you may fall and hurt yourself or the product may be damaged.

To avoid burning yourself, do not touch the vents or lamp cover while operating or right after turning off the product.

Do not open any cover on the product.

- This would prove hazardous because of high-voltage current inside the product.

Be careful not to touch the ventilation hole while the projector is on. The hot air comes out.



When a gas leak occurs, do not touch the product or the power plug and ventilate immediately.

- A spark may result in an explosion or fire.
- During a thunder or lighting storm, do not touch the power cord or antenna cable

Do not touch the lens on the product.

- This may cause damage to the lens.

Do not touch any outer part of the product with tools such as a knife or a hammer.

To clean dirt or stains on the front projection lens, use spray or a wet cloth dampened with neutral detergent and water.

Ask a Service Center to clean the interior of the projector at least once per year.

Do not clean the product using water spray or a wet cloth. Avoid using any chemicals such as detergents, industrial or automotive polish, abrasive, wax, benzene, alcohol on any plastic part of the product such as projector case, since this may cause damage.

Do not use any undesignated battery.

The ventilation hole is hot for some time though the projector is turned off. Keep you hands or body off the ventilation hole.

Do not place objects vulnerable to heat near the projector.

Be careful to keep your body away from the projector lamp. The lamp is hot.

(Children and those who have sensitive skin should be more careful.)

2 Installation and Connection

2-1 Package Contents

•Unpack the product and check if all of the following contents have been included.

• Store the packaging box in case you need to move the product at a later stage.

Projector

CONTENTS			
Quick Guide	Product Warranty	User Manual	Power Cord
Remote Control / 1 Battery (CR 2025, Not available in all locations)	Cleaning Cloth	Adapter	D-Sub Cable

2-2-1 Installing the Projector

Install the projector so that the beam from the projector is perpendicular to the screen.

•Place the projector so that the lens is at the center of the screen. If the screen is not vertically installed, the picture on the screen may not be a rectangle.

•Do not install the screen in bright surroundings. If the screen is too bright, the picture on the screen will not be displayed clearly.

•When installing the screen in bright surroundings, use curtains.

•You can install the projector in the following locations: Front-Floor / Front-Ceiling / Rear-Floor / Rear-Ceiling.(To view the installation position settings)

To view the picture when installing the projector behind the screen

Install a semi-transparent screen.

Select Menu > Setup > Install > Rear-Floor

To view the picture when installing the projector in the front of the screen

Install the projector at the side where you are watching the screen.

Select Menu > Setup > Install > Front-Floor

2-2-2 Leveling with Adjustable Feet

For level placement of the projector, adjust the Adjustable Feet of the projector.

You may adjust the level of the projector up to 3 degrees.

Depending on the position of the projector, Keystone distortion of the image may appear.

2-2-3 Zoom and Focus Adjustment

Focus the picture on the screen using the Focus Ring.

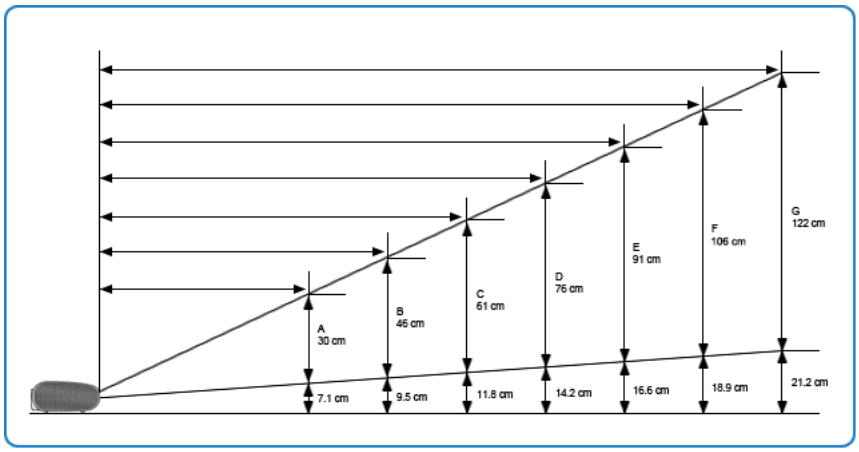
1 Focus Ring

If your product is installed at a location out of the specified projection distance (refer to Screen Size and Projection Distance), the focus cannot be adjusted correctly.

2-2-4 Screen Size and Projection Distance

Install the projector on a flat, even surface and level the projector using the adjustable feet to realize optimal picture quality.

If images are not clear, adjust them using the Focus Ring, or move the projector forward and backward.



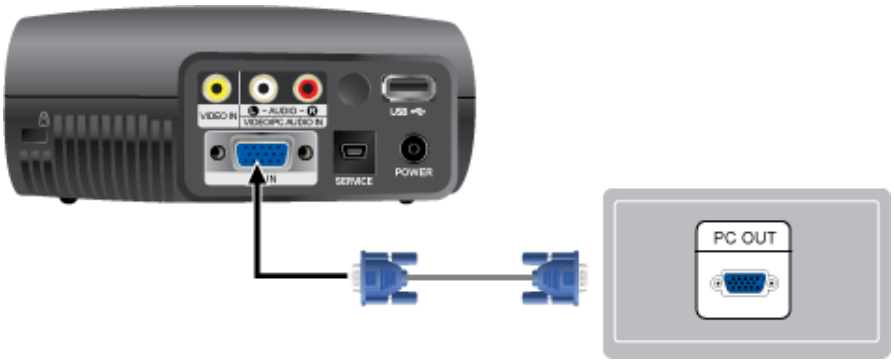
1. The screen height and diagonal length according to the projection distance

SCREEN POSITION	A	B	C	D	E	F	G
Projection Range	68 cm / 26.8 inches	104 cm / 40.9 inches	140 cm / 55.1 inches	176 cm / 69.3 inches	212 cm / 83.5 inches	248 cm / 97.6 inches	283 cm / 111.4 inches
Screen height	30 cm / 11.8 inches	46 cm / 18.1 inches	61 cm / 24.0 inches	76 cm / 29.9 inches	91 cm / 35.8 inches	106 cm / 41.7 inches	122 cm / 48.0 inches
Screen diagonal length	50.8 cm / 20 inches	76.2 cm / 30 inches	101.6 cm / 40 inches	127 cm / 50 inches	152.4 cm / 60 inches	177.8 cm / 70 inches	203.2 cm / 80 inches

The projection distance is the horizontal distance between the projector and the screen.

2. When your P410 projector is installed in a location where the projection distance matches the screen diagonal length, you will enjoy a clear screen with no distortions (keystone).

2-3-1 Connecting with a PC



1. Connect [PC IN] port on the rear side of the projector to the monitor output port of the PC using a PC video cable.
2. When connections are all completed, connect both power cords of the projector and the PC.
3. Connect the [VIDEO/PC AUDIO IN] input port of the projector to the speaker output ports of the PC using an audio cable.

This product supports plug and play and therefore, if you use Window XP, you do not need to setup the driver on your PC.

Using the Projector

1. Turn on the projector and press the [SOURCE] button to select <PC>.

If the <PC> Mode is not available, make sure the PC video cable is properly connected.

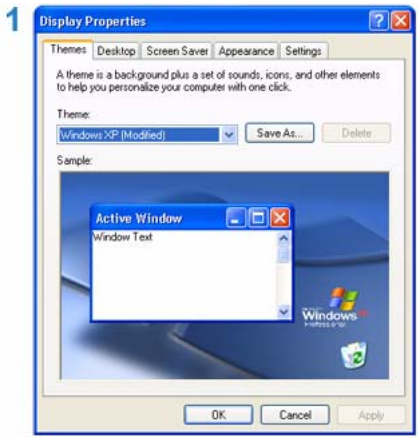
2. Turn on the PC and set the PC Environment when necessary.
3. Adjust the screen.(Auto Adjustment)

2-3-2 Setting up the PC Environment

Check the following items before connecting your PC to your projector.

1. Click the right mouse button on the Windows desktop and click on [Properties].

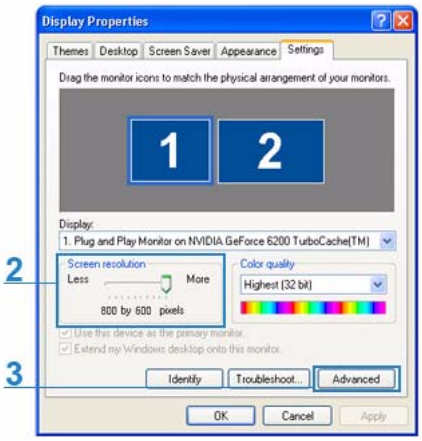
<Display Properties> tab will appear.



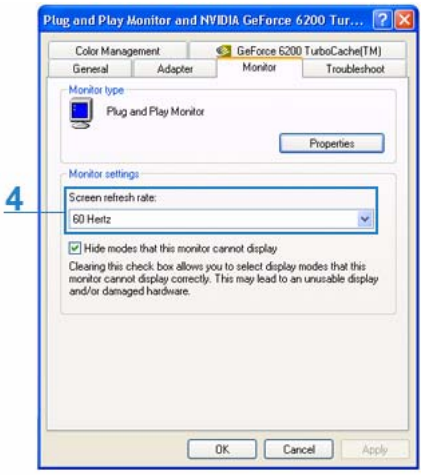
2. Click on [Settings] tab and set the <Screen resolution> by referring to <Resolution> described in the display mode table supported by this projector.

You do not have to change the <Color quality> setup.

3. Press the [Advanced] button. Another property window will appear.



4. Click on [Monitor] tab and set the <Screen refresh rate> by referring to <Vertical Frequency> described in the Supported Resolution/Size Modes table.
   This will set both the vertical and horizontal frequencies.



5. Click the [OK] button to close the window, and click the [OK] button of the <Display Properties> window to close the window. The computer may restart automatically.
6. Shut down the PC and connect to the projector.

- •Process might vary depending on your type of computer or Windows version.
  (For example, [Properties] appears instead of [Properties (R)] as shown in 1.)
- •This appliance supports up to 32 bits per pixel in Color quality when it is used as a PC monitor.
- •Projected images may differ from the monitor depending on the monitor manufacturer or Windows versions.
- •When connecting the projector to a PC, check that the PC setup complies to display settings supported by this projector. If not, there may be signal problems.

2-3-3 Supported Display Modes

RESOLUTION	HORIZONTAL FREQUENCY (KHZ)	VERTICAL FREQUENCY (HZ)	CLOCK FREQUENCY(MHZ)	POLARITY
IBM, 640 x 350	31.469	70.086	25.175	+/-
IBM, 640 x 480	31.469	59.940	25.175	-/-
IBM, 720 x 400	31.469	70.087	28.322	-/+
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	57.284	-/-
VESA, 640 x 350	37.861	85.080	31.500	+/-
VESA, 640 x 400	37.861	85.080	31.500	+/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 720 x 400	37.927	85.039	35.500	-/+
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 800 x 600	53.674	85.061	56.250	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1024 x 768	68.677	84.997	94.500	+/+
VESA, 1280 X 1024	63.981	60.020	108.000	+/+

If there is no signal input for about twenty (20) seconds while a PC cable is connected, the product is turned off automatically.

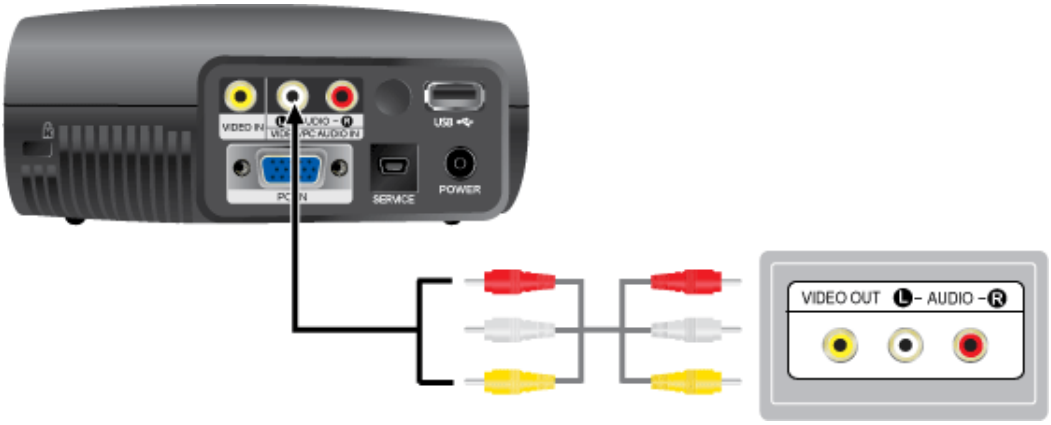
2-4 Connecting the Power

Rear of Projector

1. Connect the adapter to the power port.
2. Connect the power cord to the adapter and connect it to a wall outlet.
3. When the power is connected, the screen turns on automatically. Do not look at the lens while connecting the power.

Use only an Samsung authorized adapter.

2-5 Connecting an A/V device with an audio/video cable



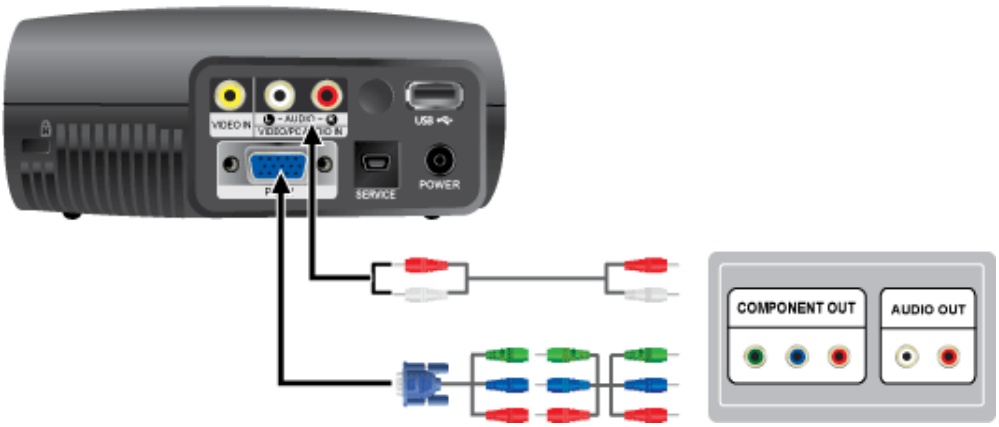
1. Connect [VIDEO IN(yellow)] input port of the projector to the VIDEO (yellow) OUT port of the video equipment using a video cable.
   Connect the [L-AUDIO-R] input port of the projector to the Audio (L), Audio (R) output ports of the external device, such as a DVD, VCR or camcorder using an audio cable.
2. When the connections are all completed, connect both power cords of the projector and the DVD, VCR, or camcorder.

Using the Projector

1. Turn on the projector, press the [SOURCE] button to select the external device (DVD, VCR or camcorder) that is connected.
2. If the corresponding mode is not selected, check whether the video cable is connected correctly.

- Check that the projector and the video equipment are turned off before connecting cables.
- The <Video> mode brightness is lower than <PC> and <MEDIA PLAY> mode.

2-6 Connecting an A/V device with a Component/D-Sub Cable



1. Connect [PC IN] input port on the rear of the projector to the COMPONENT port of AV equipment using a D-Sub/Component cable(Not supplied).
2. Connect audio cable(Not supplied) to the audio input port on the rear of the projector.

2-7 Connecting a USB Device

1. Connect your USB device to the USB port at the back of the projector to play videos, photos, and music.

Available file system: FAT, FAT32(NTFS is not supported.)

Multi Partition is not supported.

Multi Reader device is not supported.

2-8 Kensington Lock

Kensington Lock

A Kensington Lock (not supplied) is an anti-theft device that enables users to lock the product so that they can safely use it in public locations. Since the shape and usage of the locking device may differ depending on the model and the manufacturer, for more information, refer to the User Manual supplied with the locking device.

Locking the product

1. Insert the locking part of the locking device into the hole of the Kensington lock of the product and turn it in the locking direction.
2. Connect the Kensington Lock cable.
3. Tie the Kensington lock cable to a desk or heavy object.

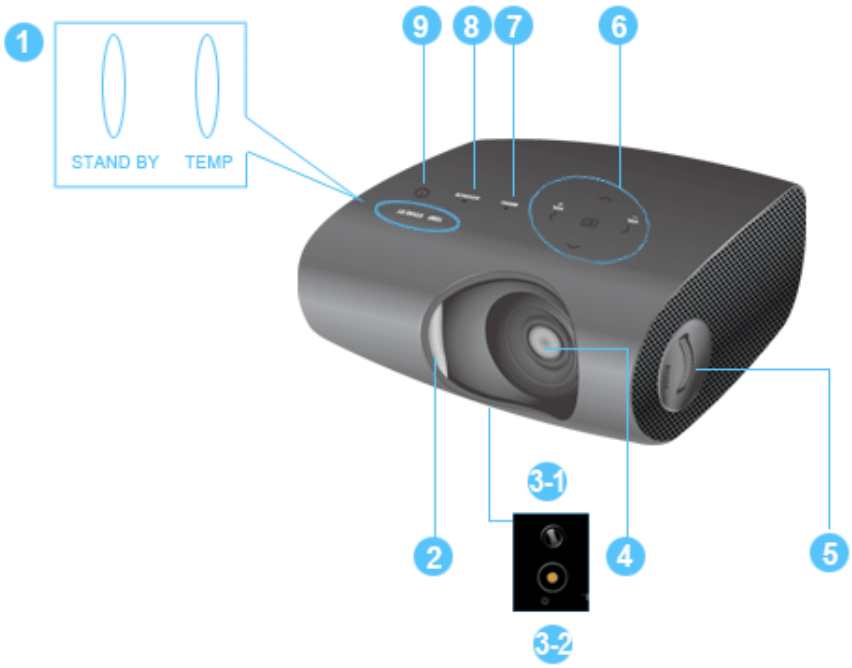
You can purchase the locking device from an electronics store or an online shop.

3 Using

3-1 Product Features

- High Mobility Design
  - Small Size.
  - Lightweight.
  - Play videos, photos, music using a USB device.
- Next Generation Backlight Light Source, LED Lamp
  - Effective energy saving by using low voltage.
  - Semi-permanent long lifetime guaranteed.

3-2 Front, Upper



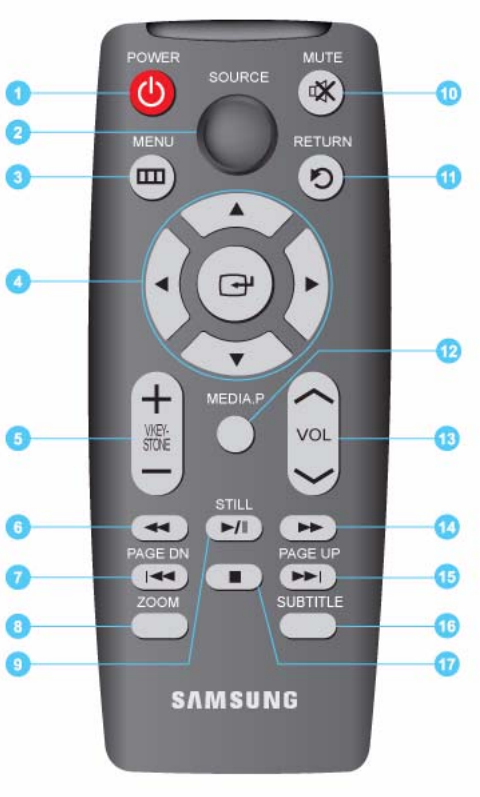
NAME	DESCRIPTION
1.Indicators	- TEMP (Red LED) - STAND BY (Blue LED) Refer to the LED Indications.
2. Lens cover	-
3-1. Adjustable Feet	You can adjust the screen position by moving the adjustable feet up and down.
3-2. Tripod holes	-
4. Lens	-
5. Focus Ring	Used for Focus Adjustment.
6. Move ∧∨<> / Select ⏎ / Volume VOL VOL button	∧∨<> / ⏎: Use this button to move to or select an item within a menu. VOL VOL : Use this button to adjust the volume.
7. MENU Button	Used to display Menu Screen.
8. SOURCE Button	Use this button to select the external device signal.
9. POWER (⏻) Button	Used to turn the projector on or off.

•The buttons on the top of the projector are touch buttons.
Touch them lightly with your fingers to use them.

•When using a tripod, make sure to use one with a screw length of 5.5 mm or less.
If the screw length is longer than 5.5 mm, you will not be able to fix the projector to the tripod firmly, which may result in damage to the projector or tripod.

•If you use screws to hold the tripod, be sure to use Machine screws M1/4 inch or smaller.

3-3 Remote Control



1. **POWER Button** ( )
   Use this button for turning the product on and off.
2. **SOURCE Button**
   Used to check or select the connection status of external devices.
3. **MENU Button** ( )
   Used to display Menu Screen.
4. **Move (▼▲◄►)/ ( ) Button**
   Used to move to or select each menu item.
5. **V. KEYSTONE Button** ( )
   Use this when the screen is displayed in a trapezoid shape.
6. **REWIND button** ( )
   Rewind the movie in the Media.P mode.
7. **PAGE DN button** ( )
   Use to select the previous file.
8. **ZOOM Button**
   Enlarges picture.
9. **STILL Button** ( )
   Used to see still images.
10. **MUTE Button** ( )
    Press to mute the sound temporarily. Displayed on the bottom left of the screen. Press the MUTE button again or the VOL button ( ) when the sound is muted to hear sound again.
11. **RETURN Button** ( )
    Returns to the previous menu.
12. **MEDIA.P Button**
    Used as a shortcut button to MEDIA.P.
13. **VOL Button** ( )
    Used to control the volume.
14. **FAST FORWARD button** ( )
    Fast forward the movie in the Media.P mode.
15. **PAGE UP Button** ( )
    Use to select the next file.
16. **SUBTITLE Button**
    Sets subtitles.
17. **STOP Button** ( )
    Stops video or music in the MEDIA.P mode.

Make sure to place your remote control on a table or desk.

If you step on the remote control, you may fall and hurt yourself or the product may be damaged.

You can use the remote control up to a distance of about 23 feet(7 m) from the product.

3-4 LED Indications

LED Indications

●:Light is On ◐:Light is Blinking ○:Light is Off

STAND BY	TEMP	INFORMATION
●	○	This state occurs when power is supplied to the projector normally after the POWER button on the projector or the remote control has been pressed.
◐	○	• This state appears when the projector is preparing an operation after the POWER button on the projector or the remote control has been pressed. • The POWER button is pressed to turn off the projector, and the cooling system is in operation to cool off the inside of the projector. • This is the state where the product is turned off automatically since there was no signal input while a PC cable was connected.
○	○	The projector is in normal operating condition.
◐	◐	Refer to Action 1 below if the cooling fan inside the projector is not in normal operation condition.
○	◐	Power is turned off automatically when temperature inside of the projector goes beyond the control limit. Refer to Action 2.
◐	●	This state occurs when the auto color compensation function has an error. Refer to Action 3.

Clearing Indicator Problems

CLASSIFICATION	STATE	MEASURES
Action 1	When the cooling fan system is not in normal operating condition.	If the symptom remains even after disconnecting and then reconnecting the power cord and turning the projector on again, contact a Samsung service center.
Action 2	When temperature inside of the projector becomes too high.	Adjust the installation state of your projector by referring to the Installation Precautions section listed above. Cool down your projector sufficiently and then operate it again. If the same problem occurs continually, contact a Samsung service center.
Action 3	When the sensor system inside the projector is not operating normally.	Cool your projector down sufficiently and then operate it again. If the same problem occurs again, contact a Samsung service center.

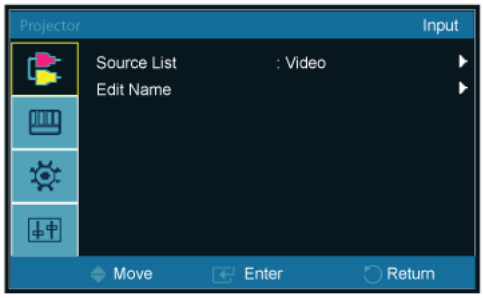
This Projector uses a cooling fan system to keep the unit from overheating. Operation of the cooling fan may cause noise, which does not affect the product performance and is part of normal operation.

3-5 Using the Screen Adjustment Menu (OSD: On Screen Display)

The Screen Adjustment Menu (OSD: On Screen Display) Structure

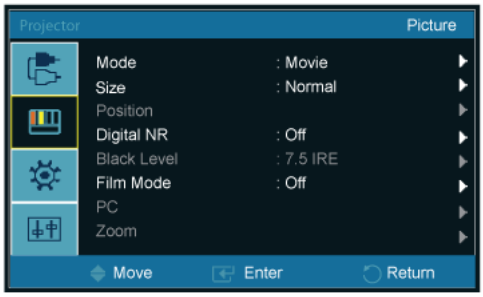
MENU	SUB-MENU				
Input	Source List	Edit Name			
Picture	Mode	Size	Position	Digital NR	Black Level
	Film Mode	PC	Zoom		
Setup	Install	V-Keystone	Background	Test Pattern	Factory Default
	Video Type				
Option	Language	Menu Option	Information		

3-5-1. Input



MENU	DESCRIPTION
Source List	You can select a device connected to the projector to display. • <Video>- <PC>-<MEDIA PLAY>
Edit Name	You can edit the names of devices connected to the projector. • <Video>- <PC>

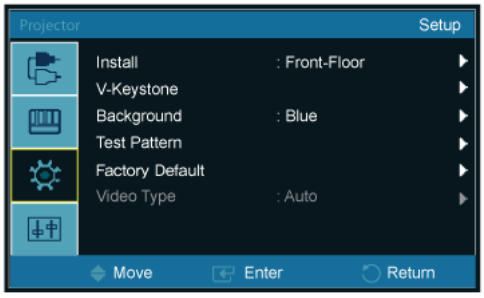
3-5-2. Picture



MENU	DESCRIPTION
Mode	Select a screen state which is customized to your projector or change the screen mode as required. • <Mode> • <Dynamic > : Select this mode for a brighter and sharper picture than Standard Mode. • <Standard> : This is the picture mode optimized to the standard broadcast signal. • <Movie> : Optimize the picture for watching movies. • <Monitor> : Optimize the picture for presentatations. You can only set in [PC] mode. • <Sports> : Optimize the picture for watching sports. • <User> : Select when you adjust the picture to suit your preference. • <Contrast > : Used to adjust the contrast between the object and the background. • <Brightness > : Used to adjust brightness of the entire picture. • <Sharpness > : Used to adjust the sharpness of the picture. • <Color > : Used to adjust color lighter or darker. You can only set the <Color> in <Video> mode. • <Tint> : Used to obtain more natural color of objects using Green or Red enhancement. When the input signal is <PC> or PAL and SECAM of the <AV> mode, the <Tint> can't be adjusted. • <Color Temperature> : You can change tint of the entire screen to suit your needs. You can not set in <PC> mode. • <Cool2 > : Suitable to use when the surroundings are very bright. • <Cool1 > : Suitable to use when the surroundings are somewhat bright. • <Normal > : Used when watching most scenes. This presents colors most accurately. • <Warm > : Select this when watching a black and white movie for optimal quality. • <Color Gamut> • <Wide > : Displays the native color gamut. • <Normal > : Normal Color Gamut offers flat and natural color tone. • <SMPTE_C> : Standardized for Video Equipment by the Society of Motion Picture and Television Engineers. • <EBU> : Regulations and standards for European Broadcasting Production and technology, standardized by the European Broadcasting Union. • <Gamma > : An image compensation function that controls the settings according to the video properties. • <Film >: The best setting for watching a film. • <Video > : The best setting for watching a TV program. • <Graphic >: The best setting when you have a PC connected. • <Vivid > : The gamma mode suitable for watching a movie. • <Save > : Used to save custom picture settings. • <Reset > : Restores the mode settings to the factory defaults.
Size	You can select a screen size according to the type of scene. • <Normal>-<Zoom 1 >-<Zoom 2 >-<16 : 9> Available picture size in the PC and Media Play mode is <normal>, <16:9>.

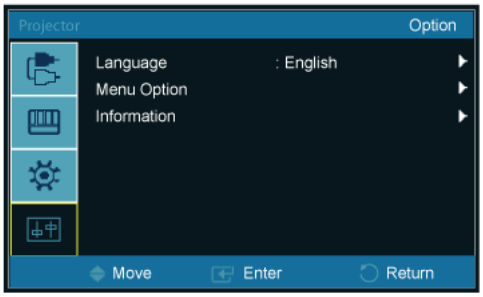
MENU	DESCRIPTION
Position	Adjust the screen position if it is not aligned. ✎ You can only set a position in <PC> mode.
Digital NR	When a dotted line is displayed or the screen shakes, you can view the picture with better visual quality by enabling Noise Reduction.
Black Level	If the picture seems too bright, you can set a darker black level. ✎ Black level is automatically set in the <Video> input mode. You can make the manual settings shown below only when a component signal is supplied. • <0 IRE> : Default black level. • <7.5 IRE> : Set the black level so it is darker.
Film Mode	Using this function, you can set the display mode optimized for playing movies. <Film Mode> provides optimal display settings for movies. ✎ You can only set <Film Mode> in <Video> mode. • <Off >-<On>
PC	Eliminates or reduces noise that causes unstable screen quality, such as screen shaking. If the noise is not removed using Fine Adjustment, adjust the frequency to the maximum and then perform Fine Adjustment again. ✎ Only activated in the PC environment. (component signals are not supported) • <Auto Adjustment > : Used to adjust frequency and phase of PC screen automatically. • <Coarse > : Used to adjust frequency when vertical lines appear on PC screen. • <Fine> : Used to fine tune the PC screen. • <Reset > : Using this function, you can reset the PC menu settings to the factory default settings.
Zoom	Used to zoom in on the PC display screen. ✎ Only activated in the PC environment.

3-5-3. Setup



MENU	DESCRIPTION
Install	To tailor the picture to the installation location, you can invert the projected images vertically/horizontally. • <Front-Floor >: Normal Image • <Front-Ceiling >: Horizontal/Vertical Reversed Image • <Rear-Floor>: Horizontally Reversed Image • <Rear-Ceiling > : Vertically Reversed Image
V-Keystone	If video scenes are distorted or tilted, you can compensate for this using the vertical Keystone function. As the Vertical Keystone function compensates for screen distortions via software, we recommend installing the projector so that no screen distortions occur in the horizontal and vertical directions, rather than using the vertical keystone function.
Background	You can set the Background that is displayed when there is no signal from the external device connected to the projector.If a signal is received, the Background you set disappears and a normal screen is displayed. • <Blue > -<Black >
Test Pattern	Generated by the projector itself. Utilized as standard to optimize the installation of the projector. • <Crosshatch > - You can check whether the picture is distorted or not. • <Screen Size > - You can refer to picture format sizes such as 1.33 : 1 or 1.78 : 1. • <Red> - Red Screen, only for color adjustment. • <Green > - Green Screen, only for color adjustment. • <Blue > - Blue Screen, only for color adjustment. • <White > - White Screen, only for color adjustment. • <6500K_White > - White Screen, brings out the white tones for a more real white. The Red/Green/Blue colors of the test patterns are only for the color adjustment procedures, and may not comply with the actual colors displayed during video playback.
Factory Default	Using this function, you can reset various settings to the factory default.
Video Type	In PC mode, if the projector does not recognize the type of input signal automatically and the screen quality is abnormal, you can select the type of input signal manually. • <Auto > : The type of input signal is recognized automatically. • <RGB> : Select this when a PC providing RGB output is connected to the D-sub terminal. • <YPbPr>: Select this when an AV device (STB, DVD, etc.) providing YPbPr output is connected to the D-sub terminal.

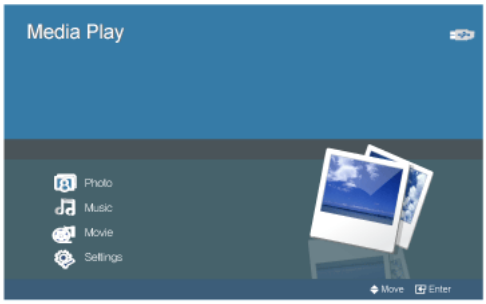
3-5-4. Option



MENU	DESCRIPTION
Language	You can select the language used for the menu screen. • <English> - <Deutsch> - <Français> - <Italiano> - <Svenska> - <Español> - <Nederlands> -<Português> - <Русский> - <Türkçe> - <中国语> - <한국어> The selected language is applied to both main OSD and MEDIA PLAY menus.
Menu Option	• <Position> : You can move Menu Position up/down/left/right. • <Transparency > : You can set the translucency of menu. • < High>-<Medium >-<Low>-<Opaque> • <Display Time > : You can set the display time of the menu. • <5 sec>-<10 sec>-<30 sec>-<60 sec>-<90 sec>-<120 sec>-<Stay On >
Information	You can check external source signals, picture setup, PC picture adjustment.

4 Media Play Function

4-1 Precautions on using a USB storage device



- •This product does not support multi-card readers.
- •This product does not work if the USB storage device is connected by USB HUB.
- •Some products which do not comply with standard USB specifications might not operate normally.
- •A USB storage device with automatic recognition application or its own driver might not operate normally.
- •A USB storage device that uses only a designated driver might not be recognized.
- •Recognition speed for USB storage device may vary by device.
- •Do not turn off the product or pull a connected USB storage device out while a USB storage device is in use. Doing so may result in damage to the USB storage device or stored file.
- •Use a USB storage device which contains normal files. If not, it can be cause a malfunction or the files may not play.
- •USB storage devices must be formatted with FAT or FAT32(recommended) file system supported by Windows. It may not work normally if USB storage device is formatted with another program.
- •If USB storage device uses external power, please connect USB storage device to external power and use.
- •Use the USB cable provided with the USB device when connecting to the projector. (For more information on purchasing cable and external devices, contact the respective manufacturer.)
- •We do not guarantee service if a malfunction occurs with any external device caused by using a cable that does not comply the designated standards.
- •As the data in USB storage device can be damaged, please back up important data to avoid loss.
- •When using USB storage device with the projector, subfolders with a maximum depth of 4 from the top folder are supported. Also, if the number of files(including folder) in the same folder is more than 2,900, it is not recognized. It may also take long time to display according to the number of files.
- •Multi Partition is not supported.
- •If an external memory device does not operate after connecting to the product, try to connect it to a PC. If it still does not operate normally, contact the memory device's manufacturer service center or related customer center.
- •USB storage device is not writable.

4-2 Photo

When selecting thumbnails,

You can view image files stored in a USB device.

* Press the MEDIA.P button to display the menu for the selected item.

MENU	DESCRIPTION
Play Photo	Start Slideshow.
Play Mode	• <All photos > : Plays all available image files. • <Photo in Folder > : Plays all image files in a selected folder. • <Shuffle all photos > : Randomly plays all available image files in a USB storage device. • <Shuffle photo in Folder > : Randomly plays all image files in a selected folder. • <Repeat one photo > : Displays an image file repeatedly.
Delete	Deletes a selected image.
Delete All Files	Deletes all image files in a USB storage device.

To use this function in your presentation, convert general word processor files to image files before saving them to a USB storage device.

e.g.) .ppt(Microsoft Powerpoint) → .jpg /.bmp /.gif

.pdf(Adobe Acrobat) → .jpg

Caution: Make sure to save image files to your USB storage device in the order of presentation.

Slideshow

You can set several options while playing images.

* Press the MEDIA.P button to display the menu for the selected item.

MENU	DESCRIPTION
Slideshow Setting	You can set several options while playing images. • <Manual> - <Auto>
Transition	Sets a pattern for a slide show. • <No Effect> - <Fade> - <Blind> - <Coloration> - <Motion> - <Random> •If the picture size is 32x32 or less, <Motion> effect is disabled. •If you set <Motion>, you cannot adjust <Aspect Ratio>. •If you set <Random>, <Motion> effect is not supported.
Speed	Sets a playback speed for a slide show. • <Fast> - <Normal> - <Slow >
Play Mode	• <All photos > : Plays all available image files. • <Photo in Folder > : Plays all image files in a selected folder. • <Shuffle all photos > : Randomly plays all available image files in a USB storage device. • <Shuffle photo in Folder > : Randomly plays all image files in a selected folder. • <Repeat one photo > : Displays an image file repeatedly.
Rotate	Rotates an image using [⏎] button on the remote control. • <90°> - <180°> - <270°> - <Original>
Aspect Ratio	Rotates an image using direction keys on the remote control. • <Original Fit > : Displays an image with its original size. • <Auto Fit > : Displays an image with its optimal aspect ratio. • <Fit to Width > : Displays an image to fit the vertical length of a screen. • <Fit to Screen > : Displays an image as a full screen.
Background Music	• <On > : Plays all music files in a USB device consecutively. • <Off > : Stops background music. • <Music Setting> : Opens the Music folder and selects background music.

Menu displayed when selecting a music list.

You can listen to music files stored in a USB device.

* Press the MEDIA.P button to display the menu for the selected item.

MENU	DESCRIPTION
Play Music	Plays music files.
Play Mode	• <All musics > : Plays all available music files. • <Music in Folder > : Plays all music files in a selected folder. • <Shuffle all musics > : Randomly plays all available music files. • <Shuffle music in Folder > : Randomly plays all music files in a selected folder. • <Repeat one music > : Plays a selected music file repeatedly.
Delete	Deletes a selected music file.
Delete All Files	Deletes all music files in a USB storage device.

Menu displayed when playing music.

You can set several options for playing music with Mediaplay.

* Press the MEDIA.P button to display the menu for the selected item.

Depending on the Menu language you selected, your music file information [ ] may not be properly displayed. If this occurs, press the MENU button and select <Language> in the <Option> menu, to change the language so it matches the music file's language.

MENU	DESCRIPTION
Play Mode	• <All musics > : Plays all available music files. • <Music in Folder > : Plays all music files in a selected folder. • <Shuffle all musics > : Randomly plays all available music files. • <Shuffle music in Folder > : Randomly plays all music files in a selected folder. • <Repeat one music > : Plays a selected music file repeatedly.
Repeat(A-B)	Plays a selected section repeatedly. Press the [ZOOM] button to set a starting point and finishing point

4-4 Movie

Menu displayed when selecting a movie list.

You can view video files stored in a USB device.

* Press the MEDIA.P button to display the menu for the selected item.

MENU	DESCRIPTION
Play Movie	Plays video files.
Play Mode	• <All Movies > : Plays all available video files. • <Movie in Folder > : Plays all video files in a selected folder. • <Shuffle all movies > : Randomly plays all available video files. • <Shuffle movie in Folder> : Randomly plays all video files in a selected folder. • <Repeat one movie > : Plays a selected video file repeatedly.
Delete	Deletes a selected file.
Delete All Files	Deletes all video files in a USB storage device.

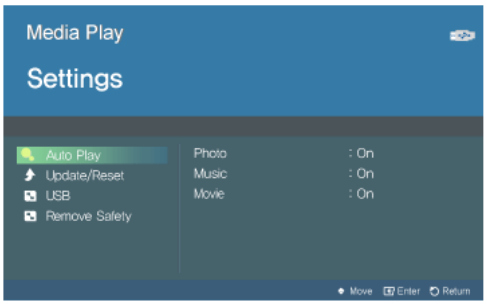
Menu displayed when playing a movie

You can set several options for playing video with Mediaplay.

* Press the MEDIA.P button to display the menu for the selected item.

MENU	DESCRIPTION
Play Mode	• <All Movies > : Plays all available video files. • <Movie in Folder > : Plays all video files in a selected folder. • <Shuffle all movies > : Randomly plays all available video files. • <Shuffle movie in Folder > : Randomly plays all video files in a selected folder. • <Repeat one movie > : Plays a selected video file repeatedly.
Aspect Ratio	• <Fit to Width > : Plays video to fit the vertical length of a screen. • <Fit to Screen > : Plays video as full screen.
Caption	• <On/Off> : Shows / hides subtitles. ✎ • If the subtitles are not displayed, make sure to set the Caption (subtitle) language so that it matches the subtitle language you want to display on the AVI file. • Only avi files are supported with the external Caption feature. • <Language > : Selects the language you want the subtitles to display in. • <Position > : Sets a position of subtitles using direction keys. (Top, Middle, Bottom) ✎ • The video must have external subtitles in order to view them with the Caption feature turned on. • See the table for supported subtitle file types. Refer to the 4-6 Supported files. • Subtitle files must be in same directory as the avi video file. • <Sync > : - 0.5Sec / Reset / +0.5Sec ✎ You can adjust the sync of the subtitles so they more closely match the person talking on-screen.
Zoom	Enlarges or shrinks a screen size. • <Zoom x2> - <Zoom x4 > - <Normal>

Configuring settings



You can configure settings for Media Play.

MENU	DESCRIPTION
Auto Play	Automatically plays when you enter the menu. • <Photo > - <Music > - <Movie>
Update/Reset	• <Firmware Update > : Starts SW Update. • <Reset Settings > : Resets settings. • <Product Information> : Views model and SW information.
USB	Displays total capacity and remaining capacity.
Remove Safety	You can remove the device from the product. If you see "USB can be removed safely", you can remove the USB device from the product.

4-6 Supported Files

		FORMAT		REMARKS
MEDIA	CATEGORY	VIDEO	AUDIO	(MAXIMUM RESOLUTION/BIT RATE ETC.)
File Extension	.mpg / .dat	MPEG-1/2	MPEG Layer 1 / 2 / 3	
	.vob	MPEG-1/2	N/A	
	.avi	XviD / 3ivX	MPEG layer 1/2/3 ADPCM(MS/Intel DVI / uLaw / aLaw) PCM / WMA	4CC : XVID / 3IVX/ DivX
		MS ISO MPEG4		4CC:M4S2/MP4S
		Motion JPEG		4CC:MJPG
	.mov / .mp4 / .3gp / .3g2	MPEG-4	MPEG Layer 1 / 2 / 3 ADPCM(MS/Intel DVI / uLaw / aLaw) PCM(8-bit / 16-bit) / AMR NB	4CC : MP4V
		Motion JPEG		4CC:MJPG/ jpeg
	.wav	N/A	MPEG Layer 1 / 2 / 3 PCM	
Video	MPEG-1	MPEG-1		NTSC: max. 720x480 @30fps PAL: max. 720x576@25fps
	MPEG-2	MPEG-2		NTSC: max. 720x480 @30fps PAL: max. 720x576@25fps
	MPEG-4	XviD/ 3ivX		NTSC: max. 720x480 @30fps PAL: max. 720x576@25fps
		MS ISO MPEG-4		PAL: max. 720x576@25fps
	Motion JPEG	Baseline JPEG		VGA@30fps

		FORMAT		REMARKS
MEDIA	CATEGORY	VIDEO	AUDIO	(MAXIMUM RESOLUTION/BIT RATE ETC.)
Audio	PCM			Mono / Stereo, Sample Rate: 8K~48KHz
	MPEG 1/2 Layer 1/2			Mono / Stereo, Sample Rate : 32 / 44.1 / 48KHz, Bit Rate:32K~448Kbps
	MPEG 1/2 Layer 3 (MP3)			Sample Rate : 8K~48KHz, Bit Rate:8K~320Kbps
	WMA			Mono / Stereo, Sample Rate : 8K~48KHz, Bit Rate:5K~192kbps *At 16M DRAM solution, WMA has limited support. See table below. Sampling Rate: 22.05K~48KHz Bit Rate:32K~192kbps
	aLaw / uLaw			Mono / Stereo, Sample Rate : 8K~48KHz, 8-bit per sample, Bit Rate:64K~768 kbps
	ADPCM (MS/ Intel DVI)			Mono / Stereo, Sample Rate : 8K~48KHz, 4-bit per sample, Bit Rate:32K~384 kbps
	AMR NB			Mono, Sample Rate :8K~48KHz, Bit Rate:32K~320Kbps
Photo	JPEG	Baseline JPEG		WxH=14592x12288, Up to 179 Mega-pixel Supported format:444/ 440/ 422/ 420/ Grayscale max.file size=40MB
		Progressive JPEB		Up to 4 Mega-pixel Supported format:444/ 440/ 422/ 420/ Grayscale max.file size=40MB
	BMP			Up to 20 Mega-pixel Supported format:444/ 440/ 422/ 420/ Grayscale max.file size=40MB
	GIF			WxH=14592x12288, Up to 179 Mega-pixel Supported format: version 87a / version 89a (except animation & interlace) max.file size=40MB

		FORMAT		REMARKS
MEDIA	CATEGORY	VIDEO	AUDIO	(MAXIMUM RESOLUTION/BIT RATE ETC.)
Subtitle	SMI			
	SRT			
	SUB			Text File Format
	ASS			
	SSA			
	PSB			

4-7 WMA Usage Specifications

BIT RATE (KBPS)	SAMPLE RATE	CHANNELS
320	44.1K	2
256	44.1K	2
192	48K	2
	44.1K	2
160	48K	2
	44.1K	2
128	48K	2
	44.1K	2
	44.1K	1
96	48K	2
	44.1K	2
80	44.1K	2
64	44.1K	2
	44.1K	1
	32K	2
48**	32K	2
32	22.05K	2

** : This definition (bit rate/sample rate/channels) might exist in other WMA decoder class as well. In that case, we cannot support it.

5 Troubleshooting

5-1 Before Requesting Service

Please check the following before requesting After-Sales service. If the problem continues, please contact your nearest Samsung Electronics Service Center.

	Symptoms	Troubleshooting
Installation and Connection	No Power.	Check the power cable connections.
	I want to install my projector on the ceiling.	The ceiling installation support is sold separately. Contact your local product distributor.
	External Source can not be selected.	Be sure that the connection cable(s) (video) is properly connected to the proper port. If the device is not connected properly, it can not be selected.
Menu and Remote Control	Remote control does not work.	Be sure that the proper external source is selected. Check the remote control battery. If there is something wrong with it, replace it with a new battery of the recommended size. Be sure to aim the remote at sensor on the back of the unit and at a distance of no more than approximately 23 feet(7 m). Remove any obstacles between your remote control and the product. Direct light from 3-way light bulbs or other lighting devices on the remote sensor of the projector may affect the sensitivity and cause the remote control to malfunction. Check if the remote control battery compartment is empty. Check whether the LED indicator on the top of the projector is turned on.
	I cannot select a menu.	Check if the menu is displayed in gray. A gray-colored menu is unavailable.

	Symptoms	Troubleshooting
Screen and External Source	Cannot see picture images.	Be sure that the power cord of the projector is connected. Be sure that the proper input source is selected. Check that the connectors are properly connected to the ports at the back of the projector. Check the Remote Control batteries. Be sure that the <Color>, <Brightness> settings are not at their lower limit.
	Poor color.	Adjust the <Tint> and <Contrast>.
	Images are not clear.	Adjust the focus. Check that the projection distance is either too far or too near to the screen.
	Strange noise.	If a strange sound continues, contact our service center.
	The operating LED is lit up.	Refer to Corrective Actions According to LED Indications.
	Lines appear on screen.	Because noise may occur when using your PC, adjust the frequency of the screen.
	No external device screen is displayed.	Check the operating status for the external device and check whether the adjustment items, such as the Brightness and the Contrast have been changed correctly in the <Mode> command screen of the Projector menu.
	Only blue screen appears.	Be sure to properly connect the external devices. Check the connection cables again.
	Screen appears in black and white or odd color./ screen is too dark or bright.	As mentioned above, check the adjustment items such as the Brightness, Contrast and Color in the menu. If you want to restore various settings to their factory defaults, run <Factory Default>from the menu.
Multimedia Function	I hear no sound when playing a video file from my USB storage device.	Check the audio format of the concerned video file. The sound effects are not available for non-supported formats such as AC3, etc. Convert the audio format into a supported format using a video converter.

6 More Information

6-1 Specifications

MODEL		SP-P410M
Panel	Size	13.97 mm / 0.6 inches
	Resolution	800 x 600 (SVGA)
Light Source		LED
Power	Power Consumption	53 W
	Voltage	DC 14V 4.5A
Dimension (Width x Height x Depth)		147.5 x 66.3 x 145.5 mm / 5.8 x 2.6 x 5.7 inches
Weight		950 g / 2.1 lbs
Key Features	Brightness	170 ANSI
	Contrast	1000:1
	Screen Size (Diagonal)	20” ~ 80”
	Projection Range	0.68 - 2.83 m
	Keystone	Vertical
Input signal	PC	1) Connector Type : 15Pin D-Sub Frequency (Refer to the Supported Display Modes.)
		2) Connection Equipment : Using Component Gender(Not supplied) Available Signal : 480i, 480p, 576i, 576p, 720p, 1080i
	VIDEO	Supported Broadcast Signals : NTSC, PAL, SECAM (PAL-60 and PAL-Nc signals are not supported.)
	USB	Movie, Picture, Music
Voice output		1W + 1W
User Environ-ment	Temperature and Humidity	Operating: Temperature 32 °F ~ 104 °F (0 °C ~ 40 °C), Humidity (10 % ~ 80 %)
		Storage : Temperature -4 °F ~ 113 °F (-20 °C ~ 45 °C) , Humidity (5 % ~ 95 %)
Noise		30 dB

This Class B equipment is designed for home and office use. The equipment has been registered regarding EMI for residential use. It may be used in all areas. Class A is for office use. Class A is for business while class B emits less electromagnetic waves than class A.

The DMD Panel used in DLP Projectors consists of several hundred thousand micro mirrors. As with other visual display elements, the DMD Panel may include a few bad pixels. Samsung and the DMD Panel manufacturer have a rigid, bad pixel identification and limitation procedure in place and products will not exceed the maximum number of bad pixels set by our standards. Rarely, non-displayable pixels may exist, however it does not affect the picture quality nor the lifespan of the product.

6-2 Contact SAMSUNG WORLDWIDE

•If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

NORTH AMERICA		
U.S.A	1-800-SAMSUNG(726-7864)	http://www.samsung.com/us
CANADA	1-800-SAMSUNG(726-7864)	http://www.samsung.com/ca
MEXICO	01-800-SAMSUNG(726-7864)	http://www.samsung.com/mx
LATIN AMERICA		
ARGENTINA	0800-333-3733	http://www.samsung.com/ar
BRAZIL	0800-124-421 4004-0000	http://www.samsung.com/br
CHILE	800-SAMSUNG(726-7864)	http://www.samsung.com/cl
COLOMBIA	01-8000112112	http://www.samsung.com/co
COSTA RICA	0-800-507-7267	http://www.samsung.com/latin
ECUADOR	1-800-10-7267	http://www.samsung.com/latin
EL SALVADOR	800-6225	http://www.samsung.com/latin
GUATEMALA	1-800-299-0013	http://www.samsung.com/latin
HONDURAS	800-7919267	http://www.samsung.com/latin
JAMAICA	1-800-234-7267	http://www.samsung.com/latin
NICARAGUA	00-1800-5077267	http://www.samsung.com/latin
PANAMA	800-7267	http://www.samsung.com/latin
PUERTO RICO	1-800-682-3180	http://www.samsung.com/latin
REP. DOMINICA	1-800-751-2676	http://www.samsung.com/latin
TRINIDAD & TOBAGO	1-800-SAMSUNG(726-7864)	http://www.samsung.com/latin
VENEZUELA	0-800-100-5303	http://www.samsung.com/latin
EUROPE		
AUSTRIA	0810 - SAMSUNG(7267864, € 0.07/min)	http://www.samsung.com/at
BELGIUM	02 201 2418	http://www.samsung.com/be (Dutch) http://www.samsung.com/be_fr (French)
CZECH REPUBLIC	800 - SAMSUNG (800-726786)	http://www.samsung.com/cz
	Distributor pro Českou republiku: Samsung Zrt., česká organizační složka, Oasis Florenc, Sokolovská394/17, 180 00, Praha 8	
DENMARK	8 - SAMSUNG (7267864)	http://www.samsung.com/dk
EIRE	0818 717 100	http://www.samsung.com/ie
FINLAND	30 - 6227 515	http://www.samsung.com/fi
FRANCE	01 4863 0000	http://www.samsung.com/fr
GERMANY	01805 - SAMSUNG (7267864, € 0.14/Min)	http://www.samsung.de
HUNGARY	06-80-SAMSUNG(726-7864)	http://www.samsung.com/hu

EUROPE		
ITALIA	800-SAMSUNG(726-7864)	http://www.samsung.com/it
LUXEMBURG	02 261 03 710	http://www.samsung.com/lu
NETHERLANDS	0900 - SAMSUNG (0900-7267864) (€ 0.10/ Min)	http://www.samsung.com/nl
NORWAY	3 - SAMSUNG (7267864)	http://www.samsung.com/no
POLAND	0 801 1SAMSUNG (172678) 022 - 607 - 93 - 33	http://www.samsung.com/pl
PORTUGAL	808 20 - SAMSUNG (7267864)	http://www.samsung.com/pt
SLOVAKIA	0800-SAMSUNG(726-7864)	http://www.samsung.com/sk
SPAIN	902 - 1 - SAMSUNG (902 172 678)	http://www.samsung.com/es
SWEDEN	075 - SAMSUNG (726 78 64)	http://www.samsung.com/se
SWITZERLAND	0848-SAMSUNG(7267864, CHF 0.08/min)	http://www.samsung.com/ch
U.K	0845 SAMSUNG (7267864)	http://www.samsung.com/uk
CIS		
ESTONIA	800-7267	http://www.samsung.com/ee
LATVIA	8000-7267	http://www.samsung.com/lv
LITHUANIA	8-800-77777	http://www.samsung.com/lt
KAZAKHSTAN	8-10-800-500-55-500	http://www.samsung.com/kz_ru
KYRGYZSTAN	00-800-500-55-500	
RUSSIA	8-800-555-55-55	http://www.samsung.ru
TADJIKISTAN	8-10-800-500-55-500	
UKRAINE	8-800-502-0000	http://www.samsung.ua
UZBEKISTAN	8-10-800-500-55-500	http://www.samsung.com/kz_ru
ASIA PACIFIC		
AUSTRALIA	1300 362 603	http://www.samsung.com/au
CHINA	800-810-5858 400-810-5858 010-6475 1880	http://www.samsung.com/cn
	HONG KONG:3698 - 4698	http://www.samsung.com/hk
INDIA	3030 8282 1800 110011 1-800-3000-8282	http://www.samsung.com/in
INDONESIA	0800-112-8888	http://www.samsung.com/id
JAPAN	0120-327-527	http://www.samsung.com/jp
MALAYSIA	1800-88-9999	http://www.samsung.com/my
NEW ZEALAND	0800 SAMSUNG (0800 726 786)	http://www.samsung.com/nz
PHILIPPINES	1800-10-SAMSUNG(726-7864) 1800-3-SAMSUNG(726-7864) 02-5805777	http://www.samsung.com/ph

ASIA PACIFIC		
SINGAPORE	1800-SAMSUNG(726-7864)	http://www.samsung.com/sg
THAILAND	1800-29-3232 02-689-3232	http://www.samsung.com/th
TAIWAN	0800-329-999	http://www.samsung.com/tw
VIETNAM	1 800 588 889	http://www.samsung.com/vn
MIDDLE EAST & AFRICA		
SOUTH AFRICA	0860-SAMSUNG(726-7864)	http://www.samsung.com/za
TURKEY	444 77 11	http://www.samsung.com/tr
U.A.E	800-SAMSUNG(726-7864) 8000-4726	http://www.samsung.com/ae

6-3 Correct Disposal - Europe only

Correct Disposal of This Product (Waste Electrical & Electronic Equipment) - Europe only

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

Correct disposal of batteries in this product - Europe only

(Applicable in the European Union and other European countries with separate battery return systems.)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.